

IN THE CLAIMS:

Please amend claims as indicated below:

Claim 1 (currently amended): A semiconductor device comprising:

A1 a first semiconductor ~~substrate~~, a and second semiconductor substrate ~~substrates, both being~~
different in lattice constant ~~from said first semiconductor substrate, said second semiconductor~~
~~substrate being bonded to said first semiconductor substrate, and bonded with each other,~~

wherein said first semiconductor substrate is a GaAs substrate and said second semiconductor
substrate is an InP substrate or a Si substrate, and

an amorphous layer made of constituent atoms of said first and second semiconductor
substrates ~~and~~ is formed at an interface between said first and second semiconductor substrates.

Claim 2 (original): The device according to claim 1, wherein one of said first and second
semiconductor substrates includes a light-emitting layer.

Claim 3 (currently amended): The device according to claim 1, wherein said first
semiconductor substrate is an InP substrate including a compound semiconductor layer of zero layers
or one or more layers and said second semiconductor substrate is a GaAs substrate including a
compound semiconductor layer of zero layers or one or more ~~layer~~ layers.

Claim 4 (currently amended): The device according to claim 3, wherein [a] said compound
semiconductor layer of said first semiconductor substrate is made of $\text{In}_{1-x}\text{Ga}_x\text{As}_y\text{P}_{1-y}$ (x and y are

numbers from zero to one).

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cont.

Claim 5 (original): The device according to claim 3, wherein a compound semiconductor layer of said second semiconductor substrate is made of $\text{Al}_x\text{Ga}_{1-x}\text{As}$ (x is a number from zero to one).

Claim 6 (original): The device according to claim 1, wherein said amorphous layer has a thickness of 1 nm or more.

Claim 14 (new): A semiconductor device comprising:

a first and second semiconductor substrates, both being different in lattice constant and bonded with each other,

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wherein an amorphous layer made of constituent atoms of said first and second semiconductor substrates is formed at an interface between said first and second semiconductor substrates, and

said amorphous layer has a linear current-voltage characteristic.

Claim 15 (new): The device according to claim 14, wherein one of said first and second semiconductor substrates includes a light-emitting layer.

Claim 16 (new): The device according to claim 14, wherein said first semiconductor substrate is an InP substrate including a compound semiconductor layer of zero layers or one or more layers and said second semiconductor substrate is a GaAs substrate including a compound semiconductor layer of zero layers or one or more layers.

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cont.
Claim 17 (new): The device according to claim 16, wherein said compound semiconductor layer of said first semiconductor substrate is made of $\text{In}_{1-x}\text{Ga}_x\text{As}_y\text{P}_{1-y}$ (x and y are numbers from zero to one).

Claim 18 (new): The device according to claim 16, wherein said compound semiconductor layer of said second semiconductor substrate is made of $\text{Al}_x\text{Ga}_{1-x}\text{As}$ (x is a number from zero to one).

Claim 19 (original): The device according to claim 14, wherein said amorphous layer has a thickness of 1 nm or more.

IN THE DRAWINGS:

The attached sheet of drawings includes changes to Figs. 6A-6C. This sheet, which includes Figs. 6A-6C replaces the original sheet including Figs. 6A-6C.

The applicants respectfully request that the proposed drawing corrections submitted herewith be approved by the Examiner, and that the outstanding objection to the drawings be withdrawn.